

Assessing the Needs of NNP Preceptors

DNP Final Project

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Abstract

Neonatal Nurse Practitioners (NNPs) provide high quality, safe and effective care to high risk neonates, and are valuable members of collaborative care team models in Neonatal Intensive Care Units (NICU) across the United States. Limited access to NNP preceptors for NNP students has been cited as a contributing factor to the NNP workforce shortage. This project, in the form of a needs assessment, aimed to better understand the challenges and needs, in terms of essential items, processes or supports, from the perspective of NNP preceptors, related to NNP students preceptorship. The 13 item needs assessment was conducted through a one time, cross sectional, electronic survey of NNPs who were members of NANN, who currently practiced in a NICU in the U.S. and had precepted an NNP student between the years of 2013-2016. Survey respondents (n=77) indicated that they need to have 1) lighter workloads, including smaller patient assignments and better preparation of students for clinical rotations; 2) meaningful rewards with consideration of monetary compensation for precepting; and 3) improved support and preparation for the role of precepting, including enhanced faculty collaboration and communication, formal preparation for the role of precepting, and defined structures and processes for precepting activities. While workload issues are difficult to address during the current national NNP workforce shortage, consideration for lighter workloads when precepting could be helpful, as would meaningful non-monetary and monetary rewards and recognition for precepting. Findings from this survey indicate that, with input from faculty, NNPs should develop and implement formal processes to guide clinical site preceptorships. Guidelines should include plans for regular communication and collaboration with faculty, formal preparation for and ongoing evaluation of the role of NNP preceptor, and definitive infrastructure to support

precepting activities. Understanding and addressing these needs could improve access to clinical preceptorships for NNP students and decrease the NNP workforce gap.

Key Words: *neonatal nurse practitioner, neonatal nurse practitioner preceptor, neonatal nurse practitioner student, precepting.*

Chapter 1: Nature of the Project

Background and Problem

Neonatal Nurse Practitioners (NNPs) are Advanced Practice Registered Nurses (APRNs) educated at the graduate or doctoral level and nationally board certified to care for high risk neonates across the care continuum from birth to the age of two years (National Association of Neonatal Nurses [NANN], 2014b). As a member of collaborative clinical teams, NNPs provide safe, effective and high-quality neonatal care in a variety of settings, including neonatal intensive care units (NICUs), transport vehicles, delivery rooms, well baby nurseries, and outpatient healthcare settings (Cusson, Buss-Frank, Flanagan, Miller, Zukowsky, & Rasmussen, 2008; NANN, 2014b). The quality, safety, and cost effectiveness of care to high risk infants by NNPs is equivalent or greater than that provided by pediatric resident housestaff and physician assistants (Bosque, 2015; Carzoli, Martinez-Cruz, Cuevas, Murphy, & Chiu, 1994; Fry, 2011; Karlowicz & McMurray, 2000; Mitchell-DiCenso et al., 1996; Sheldon, Corff, McCann, & Kenner, 2015). Consequently, the role of the NNP in the care of neonatal patients has been endorsed by the American Academy of Pediatrics (American Academy of Pediatrics [AAP], 2009) and in the Guidelines for Perinatal Care (AAP & American College of Obstetrics and Gynecology [ACOG], 2012).

Currently, the demand for NNPs outpaces the supply, and a national NNP workforce shortage exists (Meier & Staebler, 2014). Cited reasons for the shortage include decreased enrollment in NNP educational programs, limited access to clinical sites and preceptors, loss of practicing NNPs to retirement or decreased work hours, increased bed capacity in NICUs in the United States (U.S.), and decreased pediatric resident duty hours (Meier & Staebler, 2014). The shortage of NNPs is felt at the bedside, where NNPs may have burdensome workloads, creating

frustration, burnout and potential safety hazards (NANN, 2013) further challenging NNP recruiting and retention endeavors.

Ethical Principles

Important ethical principles to consider relative to the NNP workforce shortage and limited access to NNP preceptors are beneficence (the obligation to do good), nonmaleficence (the obligation to avoid harm), justice (the fair allocation of resources), and equity (the freedom from bias) (Fry, Veach, & Taylor, 2011). Consistent with the *Code of Ethics* from both the American Nurses Association (American Nurses Association [ANA], 2015) and the National Association of Neonatal Nurses (NANN) (NANN, n.d.), NNP preceptors and NNP students (along with other healthcare providers) seek to “do good” and avoid harm when caring for ill, preterm and high risk infants. Further, the act of teaching and mentoring an NNP student to become competent in the role in order to provide safe, effective and high quality care is good and beneficial for patients, families, organizations, and the professionals involved. However, the NNP workforce shortage, coupled with decreased pediatric resident duty hours, has caused many NNPs to care for higher than recommended patient care loads (Meier & Staebler, 2014), which could negatively impact the quality and safety of patient care, and could violate the ethical principle of nonmaleficence. Moreover, precepting an NNP student while carrying a difficult workload could further strain the NNP preceptor’s ability to provide safe and effective care, potentially placing the patient at risk, also violating the rule of nonmaleficence. Furthermore, the NNP workforce shortage, combined with geographic locations of academic centers and competitive compensation markets, have led to uneven distribution of NNPs across the United States (Freed, Dunham, Moote, Lamarand, & American Board of Pediatrics Research Advisory

Committee, 2010; Meier & Staebler, 2014). This unbalanced dispersal of the NNP workforce causes varying compositions of neonatal care teams (Meier & Staebler, 2014; Kenner, Corff, McCann, & Sheldon, 2015) and variable access to NNP preceptorships in some areas of the country, violating the principles of justice and equity (Fry, Veach, & Taylor, 2011).

Efforts to address the NNP workforce gap are underway at the national level through NANN and the National Association of Neonatal Nurse Practitioners (NANNP) in order to continue to provide high quality, safe and effective care to high risk infants in NICUs and delivery rooms around the U.S. (NANN, 2014a). In response, experts have called for improved access to NNP preceptorships as one strategy to close the gap in workforce (Freed et. al., 2010; NANN, 2013; NANN, 2014a; NANN, 2014b; Meier & Staebler, 2014).

Purpose of the Project

There is evidence to support the valuable contributions of NNPs' care to neonatal patients and families. Unfortunately, there is also evidence to suggest that the current workforce shortage threatens that care. This DNP final project addressed the impact of limited access to NNP preceptors to the NNP workforce shortage. Building off work that has been previously published related to challenges and needs of nurse and Nurse Practitioner (NP) preceptors, including NNPs, this project aimed to assess the needs of NNP preceptors related to the preceptorship of NNP students. In this context, "needs" referred to the essential items, resources or supports that facilitate effective preceptorship arrangements between the NNP preceptor and student. From this, evidence based strategies could be developed to mitigate these challenges, and improve the availability and accessibility of NNP preceptors, and/or lead to policy/process changes at the organization, state and national levels. In turn, these changes may help to improve access to preceptors for student NNPs and help decrease the shortage of practicing NNPs.

Clinical Practice Problem Statement

While there are many real and perceived challenges to NNP preceptorships, there is a lack of evidence describing what NNP preceptors need in order to engage in effective preceptor arrangements. Therefore, the clinical question for this project was: “When Neonatal Nurse Practitioners precept neonatal nurse practitioner students, what are the needs”?

Chapter 2: Review of the Literature

Preceptorships

In general, preceptorship describes the short term, cognitive, and apprenticeship-like relationship between a student and an experienced professional where theoretical knowledge is translated to clinical practice, offering the preceptee the opportunity to gain competence and confidence (Smedley, 2008). For nurse practitioners and other professionals, participation in a preceptorship can satisfy the preceptor's professional obligations and contribute to personal and professional growth (Gibson & Hauri, 2000), as well as prepare future generations to continue the profession (Newland, 2014). For optimal learning and growth to occur, it is important to assure that the fit in terms of expectations, personality, and learning styles between preceptor and preceptee is appropriate and the necessary provisions are in place, such as faculty support and preceptor preparation (Gibson & Hauri, 2000; Lyon & Peach, 2001; Smedley, 2008), along with conducive clinical practice site environments (Lyon & Peach, 2001; Henderson, Fox, & Malko-Nyhan, 2006). Additional factors to consider and address in order to optimize precepting arrangements for NP students include health care system credentialing of the preceptor and/or the student, state APRN scope of practice rules, state education regulations, professional organization education standards and competencies, legal liability, and billing and reimbursement issues (Amella et al., 2001; Link, 2009).

In addition to the above, NNP student preceptorship should proceed according to the *Education Standards and Curriculum Guidelines for Neonatal Nurse Practitioner Programs* (NANN, 2014c). NNP students must obtain 200 hours of didactic instruction and acquire 600 to 720 directly supervised clinical preceptorship hours spread across delivery rooms and level II, III and IV NICUs. NNP preceptors may be board certified (or eligible) physicians or masters or

doctorally prepared, board certified NNPs. The preceptorship experience should encompass a wide variety of patient populations and disease processes to manage, as well as opportunities to build competence in communication, collaboration, transitions of care and family centered care strategies. According to the *Education Standards and Curriculum Guidelines*, NNP preceptors must have completed at least one year of fulltime practice in the NNP role and clinical setting, should not precept more than two NNP students at one time, must be oriented to the NNP *Education Standards and Curriculum Guidelines*, and must be annually evaluated on his or her effectiveness as a preceptor. It is recommended that one primary preceptor be responsible for the student during the clinical site preceptorship. This primary preceptor ensures that the preceptor responsibilities are met. These include socialization into the setting, scheduling, obtaining the requisite clinical learning opportunities, and evaluation of the student's performance (NANN, 2014c).

Along with the requirements that are necessary for admission into individual academic institutions, NNP students must have attained the equivalent of 2 years of fulltime clinical practice (within the last 5 years) as a registered nurse (RN) in the care of critically ill neonates or infants in critical care inpatient settings prior to the commencement of clinical site precepted experiences (NANN, 2014c). This requisite clinical experience is considered a proxy for evidence of critical thinking skills, and is thought to be necessary for successful transition to the NNP role.

Impact to NNP Preceptors

The impact and challenges of NNP student preceptorship to NNP preceptors is not well understood. Studies of other NP preceptors find that, while they were satisfied with the preceptor role, they cited issues of high work load, poor efficiency, concerns around legal liability when

billing for services, precepting “burnout”, inadequate faculty communication and collaboration, poor preparation or “fit” of the student, lack of physical space, lack of additional compensation for precepting, and obligations to precept other professional students as challenges to precepting (Lyon & Peach, 2001; Logan, Kovacs, & Barry, 2015).

While the NNP roles of preceptor, coach and mentor are clearly delineated in the *NNP Core Competencies* (NANNP, 2014), access to NNP preceptorship can be a challenge for more than 230 NNP students each year, despite the fact that there are about 5200 practicing NNPs in the U.S. (Bellini, 2014; Meier & Staebler, 2014). In order to more fully understand recruitment of and support for NNP preceptors, a survey was conducted of all NNP Graduate Program Directors in the U. S. (N=44) and NNP preceptors (N=121) who were associated with a single university graduate NNP program (Wilson et al., 2009). The NNP preceptors who responded (n=58) to the survey were NNPs, neonatologists and pediatricians. They were asked to indicate to what extent they agreed on a scale of 1 to 5, with 1=strongly agreed and 5=strongly disagreed, that a list of supportive activities drafted by the study’s authors would be helpful to assist in their precepting activities. The results ranged from an average score of 1.7 for “providing preceptors with access to free continuing education modules online” to an average score of 2.6 for “offering an on-site workshop for preceptors”, signifying that the preceptors agreed that those supportive activities would be helpful. Also, the preceptors entered additional free text comments to identify other strategies they thought would be helpful to support precepting activities. These comments included “frequent communication with faculty”, “monetary compensation”, and “more NICU clinical experience before students enter the NNP program.” Interestingly, the list of supportive activities for NNP preceptors that was drafted by the study authors included items that were related to rewards (faculty appointment or free continuing education opportunity) and preceptor

development (preceptor workshop, online modules to enhance teaching skills, or access to the students' online discussion rooms), while the preceptors' comments were related to communication between faculty and preceptors, and specific objectives for the NNP students. This seems to indicate that the faculty and preceptors defined "supportive activities" somewhat differently.

The NNP Program Directors who responded (n=7) listed challenges that they had encountered associated with recruiting and supporting NNP preceptors. These included lack of compensation for precepting, lack of consistent on-site evaluations and feedback from faculty to the preceptors, and time and workload constraints of the preceptors. The most commonly identified support activities provided by NNP Program Directors included a letter outlining practicum objectives and preceptor responsibilities, phone calls throughout the preceptorship, and access to student course materials (Wilson et al., 2009). This study was able to determine helpful supportive strategies for NNP preceptors and recommended a model for recruitment, preparation and support for NNP preceptors based on the authors' experiences as well as recommendations from NANN and the National Organization of Nurse Practitioner Faculties (NONPF). However, the study was limited due to the bias introduced by sampling NNP preceptors from a single university program and the small response rate (16%) of NNP Program Directors. Further, less than half of the NNP preceptors who responded were clinically practicing NNPs.

NNP Preceptor Resources

As the professional organizations for neonatal nurses and neonatal nurse practitioners, NANN and the National Associate of Neonatal Nurse Practitioners (NANNP) have developed and published several policies and resources to help support NNP preceptors. A comprehensive

toolkit, *Precepting the Advanced Practice Nurse: From Expert RN to Novice NNP*, was developed and published recently (Shirland, Kaminski, Pepper, Sansoucie, & National Association of Neonatal Nurse Practitioners, 2012). The program includes a review of adult learning theory; descriptions of role transitions; general guidance for preceptors and students; strategies to help bolster the preceptorship experience including instruction on building collaborative relationships, diversity and culture inclusiveness, overview of clinical ethics, and strategies to manage the student who is not progressing as expected; case scenarios; and assessment and evaluation tools. While this tool serves as an important resource for NNP preceptors, challenges and barriers to engaging in NNP preceptorship arrangements and strategies to mitigate these are not addressed, missing an important opportunity to support preceptors.

The *Neonatal Nurse Practitioner Workforce* position statement (National Association of Neonatal Nurse Practitioners [NANNP], 2013) describes the variety of roles that NNPs serve, including that of preceptor. The statement acknowledges that NNP workloads vary from site to site, and that NNPs have competing priorities, including preceptorship, which impact their workload. Recommendations are offered in an attempt to help NNPs configure a workload that allows time to address and participate in these roles, but stops short of addressing specific needs of NNP preceptors or evidence based strategies to address challenges to precepting (NANNP, 2013).

In its seminal white paper from NANN, *The Future of Neonatal Advanced Practice Registered Nurse Practice*, the authors reviewed the contributions of the NNP role to neonatal care, identified barriers which threaten the workforce, including poor access to NNP preceptorships, and called upon NNPs to serve as preceptors (NANN, 2014). Also in 2014,

NANN published a position statement which articulates the neonatal APRN scope of practice and educational and certification requirements (NANN, 2014b). In the document, the NNP workforce shortage is noted along with the recommendation that more NNPs must be educated and prepared to take on the role of preceptor. Neither of these documents addresses the needs of NNP preceptors. While it is critical that the national organization recognizes the importance of the preceptor role to address NNP workforce issues, failure to address the challenges confronted by the NNP preceptors hinders the development of strategies to address these challenges.

Other Factors Impacting NNP Preceptorship

Model for APRN Consensus. Educating, precepting and mentoring others in the NNP role is a core competency and expectation of NNPs (NANNP, 2014). However, policies and systems can create barriers for NNP preceptors and access for NNP students. Lack of standardization of APRN licensure, accreditation, certification, and education (L.A.C.E.) creates challenges and obstacles for those components of APRN practice, including preceptorship arrangements, due to inconsistent state Nurse Practice Acts and other rules and regulations (NANN, 2014a). The APRN Consensus Model seeks to standardize L.A.C.E. across the U.S. in order to achieve full scope of practice authority, improve reciprocity between and among states, and most importantly, improve access to high quality healthcare providers for the U.S. population (National Council of State Boards of Nursing [NCSBN], 2015). Full implementation of the APRN Consensus Model could help remove some barriers to NNP preceptorship arrangements through consistent state to state education and accreditation processes.

Nursing Faculty Shortage. NNP faculty shortages and closures of multiple NNP academic programs over the past decade have decreased opportunities for some NNP students to attend academic programs near their homes, necessitating live or virtual enrollment in NNP

programs at some distance or even in different states. This in turn can create challenges in finding clinical site preceptors (Bellini, 2014; Freed, Moran, Dunham, Nantais-Smith, Martyn, & Research Advisory Committee of the American Board of Pediatrics, 2015). According to the American Association of Colleges of Nursing (AACN), a national nursing faculty shortage for both baccalaureate and graduate education exists (American Association of Colleges of Nursing [AACN], 2015). Factors contributing to the faculty shortage include an aging faculty workforce, increased rate of retirements, lower salaries compared to clinical practice, demanding workloads, and challenging students (AACN, 2005; AACN, 2015). In 2014, schools of nursing in the U.S. turned away 68,938 applicants to undergraduate and graduate programs related to insufficient levels of faculty, preceptors, clinical training sites and funding (AACN, 2015), thereby decreasing the potential pool of clinical and educational practitioners. Proposed recruitment and retention strategies to help address the faculty shortage include innovative consideration of available resources to help consolidate and streamline courses through enhanced collaboration with other nursing and non-nursing educators; re-examination of rules, regulations and policies that create barriers for those interested in faculty positions; re-evaluation of retirement processes; increased academic and clinical partnerships; and investments in faculty professional development (AACN, 2005). The *NNP Education Standards* state that directors or coordinators of NNP academic programs must be doctorally prepared, nationally certified nurse practitioners, and faculty charged with direct oversight of NNP programs must be prepared at the masters or doctoral level and nationally certified, competent NNPs (NANN, 2014c). Clearly, efforts to increase the pool of NNP faculty will pull from the pool of clinically practicing NNPs, further impacting the NNP workforce shortage.

Department of Education Deregulation. Another barrier to NNP preceptorships is the deregulation of various education laws by the U.S. Department of Education (United States Department of Education [USDOE], 2010). This move allowed individual states to implement variable rules which have created roadblocks and have incurred additional expenses for distance education programs (Freed et al., 2015). In turn, this has led to a decreased ability to educate students from different states, and further limits access to NNP precepting arrangements for students (NANN, 2014a; Kenner et al., 2015). For those NNP students who are able to secure preceptorships at some distance from or in different states than their academic programs, faculty and preceptors may struggle with issues of consistent communication and collaboration.

Individual hospital requirements. Further, individual institutional credentialing of NNP preceptors or NNP students, medical staff bylaws, and organizational billing and reimbursement structures may limit NNP scope of practice or impose tighter rules around employment and job functions, which can create challenges for NNP preceptorship arrangements (NANN, 2014a).

Critical Appraisal of the Evidence

While benefits, challenges and opportunities associated with APRN and NNP preceptorships have been identified in the literature, the needs of NNP preceptors are not well understood due to a lack of available evidence. Further, because the needs of NNP preceptors have not been the focus of research efforts, one can only hypothesize that implementation of strategies that address these identified needs will translate into an increased number of preceptorship opportunities for NNP students and a subsequent increase in the NNP workforce.

Chapter 3: Methods

The first step in the development of evidence based strategies to address the needs, or essential items, resources or supports, of NNP preceptors is to identify the needs. The identified needs will serve as the foundation for not only evidence-based strategy development, but for informing policy and protocols that guide NNP preceptorships. Because of a lack of available evidence, a national survey of NNPs was conducted, focused on their needs related to providing clinical preceptorship to NNP students. The needs assessment was a descriptive pilot study conducted through a one time, electronic survey.

Sample

Eligible participants for this project were NNPs who currently practice in an NICU in the U.S. and had precepted an NNP student in the past three years (2013-2016). Exclusion criteria included professionals who were not NNPs, NNPs who were not clinically practicing, and NNPs who had not precepted an NNP student between the years 2013-2016. According to the 2014 *NNP Workforce Survey* conducted by NANN, there were approximately 5200 NNPs in the U.S. (Meier & Staebler, 2014). Of that, 1300 NNPs belonged to NANNP in 2014 (S. Staebler, personal communication, September 24, 2014). Assuming a 10% return rate from those NNPs who belonged to NANNP and subscribed to the *NANNP Membership Digest*, the electronic blog and community of NANNP, it was expected that 130 NNPs would complete and return the survey. Eligible NNPs were provided the opportunity to participate in the survey via an invitation and electronic link to the survey, posted on the *NANNP Membership Digest*. The electronic link sent the participant to the secured survey site.

Survey Method

The electronic survey allowed the participants to identify challenges they had experienced while precepting NNP students, as well as strategies they had attempted, and strategies they recommended to help overcome challenges to precepting. Items for the survey were developed following a review of the literature and input from a focus group of eight clinically practicing NNPs with an average of 10 years of NNP clinical practice and who were currently serving as preceptors for NNP students. The focus group was asked to review the survey in order to establish content validity. Experts in a given field are commonly used to help ensure content validity, or establish that a tool/survey will measure what it says it will measure (Stommel & Wills, 2004). The survey was comprised of demographic data, items that required selection from a drop-down menu, and open-ended questions (see Appendix A).

The Qualtrics™ program was used as the platform to deliver the survey and for data analysis (Qualtrics, n.d.). Qualtrics™ is available to Ohio State University faculty and graduate students through the Office of Technology and Enhanced Learning. This program has been endorsed by The Ohio State University for use in conducting human subject studies because of the program's security and anonymity features (Qualtrics, 2016). The survey was available for four weeks, from January 4, 2016 to January 30, 2016. During this period, the invitation and Universal Resource Locator link to the survey was posted each week.

Procedure

The project proposal was submitted to The Ohio State University Institutional Review Board (IRB) and was granted exemption status. On January 4, 2016, an invitation and electronic link to the survey was placed on the *NANNP Membership Digest*. The invitation stated that the project met IRB exemption status, explained the purpose of the study and that participation was voluntary, and all responses were anonymous. Participants were able to contact the investigator

for questions about the study. Participants were asked to check a box agreeing to participate in the project and then they were directed to access the survey through the provided electronic link.

Chapter 4: Results

Demographics

In response to the survey invitation, 104 surveys were started and 92 were answered either completely or incompletely. Four out 104 respondents simply opened the survey and did not answer any questions. Of the 100 respondents who answered at least one question, 96 (96%) were clinically practicing as an NNP, and 80 of the 96 (83%) had precepted an NNP student in the past 3 years. Of the 80 eligible respondents who started the survey, 77 went on to complete the survey in its entirety. The results below are based on those 77 participants' responses.

Forty seven percent of NNP preceptors were between 51 and 60 years of age, and 25% were between the ages of 41 and 50 years. The average age of the NNP respondents in the recent NNP workforce survey was 49 years (Meier & Staebler, 2014). Ninety seven percent of the respondents in this survey were female. In this survey, 29% of respondents had 0 to 10 years of NNP practice, 31% had 11 to 20 years of NNP practice, and 40% had more than 20 years of NNP practice (see Table 1). The respondents in the recent NNP workforce survey had an average of 14 years of NNP practice experience (Meier & Staebler, 2014). In this survey, 88% of respondents worked 36 or more hours per week, compared to 82% in the recent NNP workforce survey (Meier & Staebler, 2014).

Table 1. Number of Years of NNP Practice

Number of years of practice as an NNP	# Responses	% Responses
0-5 years	6	8%
6-10 years	17	22%
11-15 years	10	13%
16-20 years	14	18%
21-25 years	16	21%
26-30 years	13	17%
31-35 years	1	1%
36+ years	0	0%
Prefer not to answer	0	0%
Total	77	100%

Most respondents (36%) primarily worked in the Southern region of the U.S., 34% in the Midwest region, 16% in the Western region and 14% in the Northeast region (see Table 2). This distribution was similar to that of the recent NNP workforce survey, in which the Southern region had the largest number of respondents, followed by Midwest, West and then the Northeast regions (Meier & Staebler, 2014). Sixty six percent of respondents primarily worked in an academic setting, and 88% scheduled to work as an NNP at least 36 hours per week.

Table 2. Region of the United States Where Respondents Practice as NNP

Region of the United States where you primarily practice as an NNP	# Responses	% Responses
West (CA,OR,WA,NV,ID,AZ,UT,MT,WY,CO,NM,HI,AK)	12	16%
Midwest (ND,SD,NE,KS,MN,IA,MO,WI,IL,IN,OH,MI)	26	34%
South (TX,OK,AR,LA,MS,KY,TN,AL,WV,VA,NC,SC,GA,FL)	28	36%
Northeast (PA,NY,MD,DE,NJ,CT,RI,MA,VT,NH,ME)	11	14%
Total	77	100%

Precepting activities took place during the daytime hours (58%), or a combination of day, night and weekend hours (40%). Preceptors indicated that they were generally expected to

precept NNP students at their primary work location (88%), and the majority of respondents have never declined to precept NNP students (83%). Of those who declined to precept an NNP student (17%), the cited reasons included comments such as “the previous student was not prepared”, “not prepared academically or clinically”, “the student did a poor job, was not interested in improving and our group refused to let her return”, “difficult to illicit critical thinking of student; many tried with her; she had problems letting go of the "bedside nurse" role”, “understaffed”, “we had too many student NPs already...”, and “not enough slots”. These comments seem to indicate that there were issues of poor preparation of the student and NNP preceptor workload.

Challenges Encountered by NNP Preceptors

When asked to identify challenges encountered when precepting an NNP student, many of the preceptors selected items which contribute to workload and workflow, such as heavy caseloads (74%), decreased efficiency of the preceptor (58%), decreased opportunities for the preceptor to perform procedures (45%), and redundancy of documentation for the preceptor (35%). Comments in the free text areas of the survey indicated that NNP student and other trainees’ needs, as well as lack of formal precepting structure impacted overall workload as well. These observations are supported by comments such as “too many students at once; the need to train residents at the same time”, “tertiary care has multiple learners.....NNP students, new NNPs, fellows, residents”, “procedural opportunities must be prioritized”, “clinical experiences for NNPs need to be formalized and standardized similar to medical student/resident experience. They are currently very unstructured and inconsistent” “...students are not assigned a primary preceptor. They have multiple preceptors, I get no report about what they have done or are capable of”, and “physical space issues in the office/charting area”.

Lack of additional compensation was selected by 64% of the respondents with a comment of “precepting is voluntary but we all participate, however, it would be nice to have some compensation”. Faculty related issues were also identified as concerns for NNP preceptors, with lack of feedback from the faculty to the preceptor (53%), lack of understanding of expectations from the faculty for the preceptor (27%), lack of understanding of expectations from the faculty for the student (26%), and inadequate feedback from the faculty to the student (23%) selected from the list of challenges. Respondents entered comments such as “faculty seem disconnected and unavailable for questions that the preceptor may have”, “...expecting the preceptor to be the educator in primary field rather than school giving the didactic (sic) information”, and “did not come to site to evaluate student or call.” Preparation for the role of preceptor proved to be a concern as well, as 30% of preceptors identified lack of training for the precepting role and discomfort with providing feedback or coaching to the student from the preceptor (22%) as challenges to precepting. Comments included “... many students simply don't have enough general NICU experience to function as a beginning NNP”, “...basic assessment skills & problem solving isn't part of the student profile”, and “effective communication and confidence building strategies should be included in NNP curriculum” (see Table 3).

Table 3. NNP Preceptor Challenges When Precepting NNP Students

When precepting an NNP student, please select all of the challenges you have encountered	# Responses	% Responses
Heavy or busy patient assignments for the preceptor	57	74%
Lack of additional financial compensation for precepting	49	64%
Overall decreased work efficiency of the preceptor	45	58%
Lack of consistent evaluations and/or feedback from faculty to the preceptor	41	53%
Decreased opportunities to perform procedures for the preceptor	35	45%
Redundancy of documentation for the preceptor	27	35%
Lack of training or preparation for the precepting role	23	30%
Lack of understanding of expectations from the faculty for the preceptor	21	27%
Lack of understanding of expectations from the faculty for the student	20	26%
Inadequate feedback from the faculty to the student	18	23%
Discomfort with providing feedback or coaching to the student from the preceptor	17	22%
Other	9	12%
Legal liability concerns for the preceptor	8	10%
General disinterest in precepting	5	6%

Strategies to Address Challenges

In response to open-ended questions, participants were asked to list strategies that the preceptor or NNP workgroup had attempted in the past to help overcome challenges related to precepting NNP students. Seventy four percent of the respondents (n=57) were able to list at least one approach, 32 percent were able to list at least two strategies, and 25 percent were able to list at least 3 strategies that had been tried in the past. Forty eight percent of the respondents felt that the strategies they had listed were either “helpful” or “very helpful”.

Using thematic content analysis of qualitative data (Burnard, 1991), the listed strategies were sorted into categories and independently validated by a second, PhD prepared faculty member. Six major categories of strategies emerged during the analysis (see Appendix B). The first category, *increased/improved structure and/or support among/within the NNP group*, was

identified by 39% of respondents who utilized strategies such as “using NANNP preceptor module”, “decrease preceptor’s assignment”, “spread precepting shifts to all group members”, and “request compensation for precepting”. The other five categories were *increased support for the NNP student* (21%) with comments such as “real time feedback for student” and “assign consistent preceptor”; *prioritized the needs of NNP students and other trainees’ needs* (11%) with comments such as “I alternate experiences for procedures between residents, fellows and NNP students”; *increased/improved support from academic faculty* (11%) with supporting comments such as “scheduling regular check in meetings with the student's faculty adviser” and “ask faculty for written goals and expectations for preceptor, student and the experience”; *improved NNP workflow/workload* (5%) with comments of “reorganizing work space” and “have student hand write a note and plan for us to go over, then NNP documents”; and *increased support from physician faculty* (3%) with comment of “asking our physicians to help with teaching our students.”

Proposed Helpful Strategies

Participants were then asked to identify strategies that they thought would be helpful to put into place to help overcome barriers to precepting at their organization. The most commonly selected were decreased preceptor workloads (69%), financial compensation for precepting (67%), adjunct faculty appointment (54%), increased feedback from faculty to the preceptor (37%), increased preparation from the faculty for the student (33%), and formal training for the preceptor (33%). The least selected items included assistance with manuscripts for the preceptor (4%), increased opportunities to maintain procedural competency for the preceptor (19%), letters of recognition to the preceptor (22%), increased faculty support for the NNP student (25%), and teaching opportunities for the preceptor (25%) (see Table 4).

Table 4. Potential Helpful Strategies for NNP Preceptors

In order to address challenges to precepting, please identify strategies that would be helpful	# Responses	% Responses
Decreased workload for the preceptor	46	69%
Financial compensation for assuming the preceptor role	45	67%
Appointment to adjunct faculty position at the academic institution	36	54%
Increased feedback from faculty to the preceptor	25	37%
Increased preparation from the faculty for the student	22	33%
Formal training related to the preceptor role	22	33%
Increased onsite support from faculty to the preceptor	21	31%
Increased faculty support for the NNP student	17	25%
Teaching opportunities for the preceptor	17	25%
Letters of recognition to the preceptor	15	22%
Increased opportunities to maintain procedural competency for the preceptor	13	19%
Other	3	4%
Assistance with manuscripts for the preceptor	3	4%

Other Comments

Finally, a free text box allowed participants to describe any other challenges or strategies that were not addressed in the survey. Fourteen comments were entered, and using thematic content analysis method (Burnard, 1991), the comments were sorted into the following three categories: *NNP student preparation*: “I find that many students simply don't have enough general NICU experience to function as a beginning NNP. One student had vast experience and she was a joy to have. Others barely have two or three years and are exiting with DNPs and are simply not ready for the role”; *infrastructure for NNP preceptors*: “precepting is not voluntary in our institution and so the person precepting is based on the student's schedule. The student has multiple different preceptors because of this. A student is additive work. There is no compensation, no recognition, no support “; and *prioritization among trainees*: “one issue to face at our academic institution is the volume of "learners." We have fellows, residents, med

students, NNP students, and new NNPs orienting. We have to rotate who goes to deliveries and has the opportunity to do procedures but that limits the exposure students get” (see Appendix C).

Chapter 5: Discussion

The purpose of this DNP final project was to assess the needs of NNP preceptors related to precepting NNP students. The demographics of this sample of NNPs were similar to that of the recent NNP workforce survey in regard to age, gender, and region of the United States where the preceptors primarily practiced. Consistent with the limited available evidence related to challenges of other NP preceptors, the results of this national survey of NNP preceptors indicate that the most frequently confronted challenges were related to 1) burdensome preceptor workloads, 2) lack of additional compensation or meaningful rewards and recognition for precepting, and 3) insufficient preparation and support of the NNP preceptor. The finding of burdensome workloads for NNPs, which is most likely due to the current NNP workforce shortage, was reinforced in this survey. However, the strong desire for preceptor compensation and the issues of insufficient preparation and support of the preceptors are interesting. Educational and professional organizations have long recommended thoughtful and intentional recruitment and retention of preceptors with utilization of meaningful rewards and recognitions as important strategies. Additionally, policy statements and guidelines have been developed to help guide the preparation and support of preceptors. It seems that there may be gaps between recommendations and actual practice.

NNP Preceptor Workload

In this survey, the overall workload was the biggest challenge for NNP preceptors, with caseload (patient assignment) identified in 74% of the responses, and decreased efficiency of the preceptor identified in 58% of responses. Additionally, respondents (69%) overwhelmingly felt that decreasing preceptor workload would be helpful for NNP preceptors, and therefore was a need. The ideal caseload for NNPs is a vexing problem. In the *Neonatal Nurse Practitioner*

Workforce position statement, NANN outlined the many roles and activities that an NNP may fulfill each day which contribute to workload, such as the number and acuity of patients to be cared for (caseload), and tasks which include delivery room resuscitation, performance of procedures, participation in patient transports, education of pediatric residents and other trainees, and committee involvement (NANN, 2013). In addition, NNP workload is influenced by the availability or absence of resources that can help to support, or make more difficult, the workload. For example, pharmacists and other specialty clinicians or the assistance of a unit secretary can help support the NNP's workload, whereas system or organizational inefficiencies such as duplicative documentation when precepting can increase workload (NANN, 2013).

NNP caseload. In the *Neonatal Nurse Practitioner Workforce* position statement, NANN provided recommendations for NNP caseloads, or patient assignments, taking into account the other tasks and roles of the job, availability of resources, and the stage of professional development of the NNP, which was informed by Patricia Benner's novice to expert model (Benner, 1982; NANN, 2013). The recommendations were as follows: for NNPs in the novice to advanced beginner stages (0-2 years of NNP practice), a caseload of 6 patients per NNP; for NNPs in the competent (2-5 years of NNP practice), proficient (5-10 years of NNP practice) and expert stages (greater than 10 years of NNP practice), a caseload of up to 10 patients per NNP when "activity is high"; and for proficient and expert level NNPs, when supervising a provider in training such as a resident, and/or when "activity is low", a caseload of up to 15 patients per NNP, regardless of setting (NANN, 2013). The levels of activity were not defined, in order to allow the individual practice settings to define these based on their specific resources and contexts.

Ideal versus actual caseloads. Currently, a national NNP workforce shortage exists, and in the recent NNP workforce survey, almost half of the respondents indicated that on average, three NNP positions were vacant in their organizations (Meier & Staebler, 2014). The NNP workforce shortage, combined with decreased pediatric resident duty hours and continued or increased needs for NICU beds around the country, has caused many NNPs to experience high and difficult caseloads (Freed et al., 2010). In the *NNP Workforce Survey*, 32% of participants responded that their actual caseloads exceeded their ideal caseloads (Meier & Staebler, 2014). Of those, 59% of NNPs working in level IV NICUs felt that their patient assignments were “unsafe”, although no definition of “unsafe” was given. When asked to identify unsafe caseloads, the average responses were 8 patients in level III NICUs and 6 patients in level IV NICUs (Meier & Staebler, 2014). The respondents in that survey had an average of 14 years of NNP experience (Meier & Staebler, 2014). Based on this information, one could assume that those respondents had attained either proficient or expert levels of NNP practice, for which the recommendation from NANN is a caseload of 10 to 15 patients, depending on patient related activities and oversight responsibilities. Hence, there seems to be incongruence between the professional organization recommendation and what the practicing NNP thinks is a reasonable patient caseload. More work needs to be done to establish evidence based metrics and benchmarks to be used when determining effective caseloads for NNPs, particularly when engaged in precepting NNP students.

Current strategies to accommodate preceptorships. While many initiatives at the professional organization, academic, and hospital levels aim to recruit and retain NNPs, it is difficult to project the duration of the NNP workforce shortage. Meanwhile, NNPs are attempting to accommodate NNP student preceptorships through strategies such as spreading

preceptorship duties among members of the team, directing more patient care activities to the non-precepting NNPs or scheduling additional NNPs on-service when a student is present. One can presume that these strategies either require more scheduled and worked hours for NNPs, or shifting workload from the preceptor onto the other NNP team members. Both of these options increase costs, to the organization in terms of increased manpower and salary to schedule more NNPs to help support the preceptor, and to the NNP teams related to increased workload, stress and frustration. Neither of these options seems attractive or sustainable.

NNP student preparation. Precepting student NNPs adds to the preceptor workload. NNP students in Masters level academic programs require 600 to 720 precepted clinical hours, and DNP students require 1000 clinical hours in order to complete the program and become eligible to sit for national certification (NANN, 2014c). Adding these NNP student preceptorship hours to already high patient caseloads can cause additional stress and burdens for the NNP preceptor (Giddens et al., 2014). In this survey, NNP preceptors identified poor preparation of the NNP student as a challenge. Comments from survey respondents seem to indicate that some students may not be well prepared or organized upon commencement of their clinical site rotations. To help address the various need of the students, NNP preceptors in this survey used various strategies to help the student gain experience and confidence. However, some preceptors noted that they only precepted NNP students who were further along in their training.

A recent national survey of NNP students in the final year of their academic programs found that NNP students were graduating with 1 to 5 years of neonatal nursing experience (Jnah & Robinson, 2015). Therefore, based on Benner's model of skill acquisition in nursing, many NNP students come to their clinical site preceptorships as novice, competent or advanced beginner neonatal nurses (Benner, 1982). According to Benner, nurses at the level of advanced

beginner demonstrate “marginally acceptable performance”, have limited prior experiences from which to pull from, rely on “rules” they have been taught in order to complete tasks, and require help when setting priorities (Benner, 1982). It is no wonder that NNP preceptors are challenged to help support NNP students at this level of nursing practice to transition to advanced practice nursing roles. Further, some graduate level nursing students may be deemed “unsafe”, which is defined as a student with a questionable level of clinical practice because of concerns related to the student’s safety, knowledge, abilities, motivation and/or interpersonal skills (Luhanga, Yonge, & Myrick, 2008; Anthony & Wickman, 2015). When precepting a student with concerns such as these, the preceptor is further burdened by the necessity of heightened oversight, documentation, coaching and evaluation responsibilities, further adding to the preceptor’s workload and need for support and preparation from faculty to help guide the preceptorship (Luhanga et al., 2008; Anthony & Wickman, 2015).

Perhaps, instead of a minimum requirement of two years of critical care neonatal nursing experience prior to NNP student preceptorships, NNP students should reach a specific level of neonatal nursing skill acquisition using Benner’s model. More research should be done to attempt to correlate successful NNP student preparation for clinical preceptorship and level of neonatal nursing competence. Regardless, to help lighten the preceptor burden associated with student preceptorships, ideally, faculty should assess students’ levels of nursing knowledge, competency and critical thinking at the outset of the academic program and consistently throughout the course of study (Giddens et al., 2014). This provides opportunities to capitalize on the student’s strengths while addressing deficiencies early in the training period. These in turn could be communicated to preceptors. Further, NNP students should complete and demonstrate competency in core content and necessary procedural and process simulations prior to starting

the clinical site preceptorships (Giddens et al., 2014). For NNP students, these could include practicing calculations of patient input, output and daily fluid and caloric content, simulation of core neonatal procedures, and rehearse for bedside rounding.

Other Trainees. NNP preceptors in this survey identified that they are also expected to provide support to other trainees such as pediatric residents. Respondents' comments seem to indicate that trying to satisfy the learning needs for all trainee types is a challenge as well.

Rewards and Recognition for Precepting

The second most common challenge identified in this survey was lack of compensation for precepting, and 67% of survey respondents thought that offering compensation would decrease challenges to precepting. Thus, compensation for precepting was identified as a need in this survey.

Non-monetary rewards for precepting. In a survey of graduate clinical preceptors, Donley et al. (2014) found that preceptors perceive the following benefits when precepting: contribution back to the profession, sharing knowledge with the student, gaining knowledge from the student, the ability to remain current and stimulated by the profession, feelings of personal satisfaction, improved teaching skills and recognition as a role model (Donley, Flaherty, Sarsfield, Burkhard, O'Brien, & Anderson, 2014).

Regardless of the intrinsic rewards associated with teaching and mentoring others, precepting generally adds to the preceptor's workload, causing some to be reluctant to take on the role. For schools of nursing, the recruitment and retention of preceptors is vitally important (Campbell & Hawkins, 2007). However, most academic programs cannot afford to monetarily compensate preceptors. Instead, professional organizations have recommended, and schools of nursing have offered, non-monetary incentives such as complimentary continuing education

hours for licensure and/or certification renewal, complimentary registration fees for educational conferences or other events held by the school of nursing, certificates or plaques of appreciation, preceptor recognition events, hand-written thank you letters, preceptor awards, vouchers or discounts for tuition or at the college bookstore, access to library resources, preceptor training workshops, adjunct or clinical faculty appointments, and assistance with writing grants or manuscripts (Campbell and Hawkins, 2007; NONPF, 2000). Many preceptors appreciate these types of rewards, and it may be helpful for faculty to determine what types of meaningful incentives they can offer and allow preceptors choose from a menu, as not all preceptors value the same things, nor do faculty and preceptors always value the same rewards (Wilson et al., 2009; Wiseman, 2013).

Models of preceptorship compensation. The topic of financial payment for precepting has been cited in this and other surveys by preceptors, including NNPs (Forsberg et al., 2015; Logan et al., 2014; Wilson et al., 2009). Models of financial compensation to preceptors exist in some professions, with the largest and most institutionalized being graduate medical education. The Graduate Medical Education (GME) model was formally created in 1965 with the passage and implementation of Medicare and Medicaid, and established the process of directing federal funds to accredited graduate physician training sites from those entitlement programs, for the purpose of defraying the costs of resident, fellow and faculty salaries and other expenses (O'Shea, 2014). Since 1983, there have been modifications and changes to the program. Currently, GME continues to be largely funded by the federal government through Medicare (\$9.7 billion), Medicaid (\$3.9 billion), Health Resources and Services Administration (\$0.46 billion), the Department of Defense, the Veterans Administration (\$1.4 billion), and the National Institutes of Health, along with variable State level funding (\$3.8 billion) and contributions from

private payers and organizations such as insurers, physician organizations, academic centers and hospitals (Dower, 2012; Institute of Medicine [IOM], 2014; O'Shea, 2014). The result is a complex, opaque and expensive system which supports approximately 115,000 medical trainees and their physician preceptors annually (Dower, 2012; O'Shea, 2014). Therefore, teaching and clinical preceptorship of medical residents and fellows is a required, planned and paid role for physicians in academic or "teaching" programs. For nurse practitioners, including NNPs, who are employed by those academic physician groups or organizations, there are expectations for teaching and precepting medical residents and fellows as well, which may or may not include allotted and paid time to do so, and may come at the expense of training nurse practitioner students (Logan et al., 2014).

Aside from the GME model, other medical training programs offer financial compensation to clinical preceptors. In a recent survey, 23% of family medicine clerkship directors at allopathic U.S. medical schools reported that they paid preceptors, generally in densely populated areas with staunch competition for clinical sites and preceptors. Preceptors were paid an average of \$170 per week per student. In the survey, many felt that compensating preceptors was not sustainable and devalued the intrinsic rewards of teaching (Anthony, Jerpak, Margo, Power, Slatt, & Tarn, 2014).

In a survey of physician assistant education program directors, 21.7% of respondents indicated they paid for supervised clinical training, with a range of payments from \$100 to \$450 per student per week. The study noted that payment for precepted clinical rotations typically increased the cost of education by \$12,000 to \$15,000 per student, which was passed along through increased tuition costs, increased student fees, and/or reallocating funds from other areas in the program's budget (Physician Assistant Education Association [PAEA], n.d.).

Governmental support for nursing education. The Nurse Training Act, or Title VIII of the Public Health Service Act, of 1964 established federal funding for nursing education. In contrast to the nearly 20 billion dollars that the federal and state governments provided for GME, \$232 million was provided in 2015 to six Nursing Workforce Development Programs, including the Advanced Education Nursing program (ANA, n.d.; Rasouli, Dash, Parragh, & Alliance for Health Reform, 2015). The Advanced Education Nursing program provides grants to schools of nursing and academic centers to help enhance the education and training for graduate nursing students, including APRN students (ANA, n.d.). More than 10,500 nurses seeking graduate level education were supported with these funds in fiscal years 2013 and 2014 (Nursing Community, 2015), however, these funds do not support or compensate APRN preceptors.

Monetary compensation by the school of nursing to APRN preceptors is not common due to a variety of reasons including budgetary constraints. APRN student education is typically self-financed through loans, scholarships and stipends. One of the biggest challenges for prospective NNP students is the cost of higher education, and serves as a barrier to pursuing a career as an NNP for many NICU nurses (Rasmussen, Vargo, Reavey, & Hunter, 2005). Therefore, it would seem unreasonable and unlikely for schools of nursing or universities to pass along the costs associated with preceptor compensation to students in the form of higher tuition and fees (Campbell & Hawkins, 2007), because doing so could further decrease enrollment, which could further decrease the NNP student pipeline and/or cause smaller NNP programs to close.

Graduate Nurse Education Demonstration project. As the nation continues to grapple with the issues of access and affordability of healthcare, and an increased emphasis on preventive and primary care, APRNs have been identified as part of the answer (Centers for Medicaid and Medicare [CMS], 2012a). Recognizing the inequity between funding for GME and

graduate nursing education (GNE), as well as challenges that schools of nursing and APRN students face with securing clinical site training, including preceptorships, the federal government has taken an interest in developing solutions to help increase the APRN provider pool (CMS, 2012a). Within the Affordable Care Act (ACA), the Centers for Medicare and Medicaid (CMS) directed \$200 million towards 5 hospitals (Hospital of the University of Pennsylvania, Duke University Hospital, Scottsdale Healthcare Medical Center, Rush University Medical Center, and Memorial Hermann-Texas Medical Center Hospital) to establish the Graduate Nurse Education (GNE) Demonstration (CMS, 2015; Dower, 2012). The goal of the four year Demonstration is to increase the number of APRNs to provide primary care, preventive care, transitional care, chronic care management, and other services that are necessary for Medicare beneficiaries (CMS, 2012a). The hospitals must partner with accredited schools of nursing and at least two non-hospital primary care centers in their communities (CMS, 2012a). The hospitals must demonstrate an increase in the number of trained APRN students during the Demonstration (CMS, 2012a). Acute care pediatric nurse practitioner, neonatal nurse practitioner and psychiatric nurse practitioner programs were excluded from the Demonstration (CMS, 2012b). This is unfortunate, because the NNP role has been recognized as an acute, primary and chronic care provider (NANN, 2014a). The payment to the Demonstration hospitals are calculated on a per-student basis and the hospitals are reimbursed for the “reasonable cost” of training the APRN students (CMS, 2012a). These costs include expenditures associated with only the clinical training component, not the didactic portion of the APRN student education, and could be used to compensate APRN preceptors, but only for the increased number of APRN students attributed to the Demonstration (CMS, 2012b). The Demonstration closed in 2015 and a final report is due to Congress by October 17, 2017. Preliminary reports are encouraging. The

Hospital of the University of Pennsylvania reported a 78% increase in APRN graduate rates during the Demonstration (Alliance for Health Reform, 2015). Hopefully, the results of the Demonstration will be favorable and lead to increased funding opportunities for GNE similar to the GME model, and thereby provide financial support to all graduate level preceptors, including NNPs.

Monetary compensation for NNP preceptors. The teaching, coaching and mentoring roles of the APRN are an intrinsic part of the job (Link, 2009) and most professional nursing organizations, including NANN, consider this to be integral to the role (NANN, 2014b). Some NNP job descriptions may list this as a requirement. While the vast majority of respondents (83%) in this survey were expected to precept in their organizations, it is not known if this expectation was included in their job descriptions. If the role of precepting, coaching and mentoring others is an expectation of the job and is listed on the job description, the NNP preceptor is receiving compensation for this activity, and the organization has a duty to ensure that their employees have the requisite training, tools and resources necessary to carry out this duty. If not already in existence, organizations should consider adding preceptorship as a function of the job and ensure that supports and tools are available to perform this. Further, methods of offering meaningful rewards and recognition to preceptors should be considered. For example, serving as a preceptor could be added to the NNP's annual performance appraisal and included in merit based salary raises, and public acknowledgement and appreciation could occur during recognition events. More research should be done to understand if NNP preceptors are truly interested in additional compensation for precepting or meaningful reward and recognition.

Preparation and Support of the Preceptor

The next most commonly selected challenges in the survey were related to preparation and support of the NNP preceptor, which included concerns with inadequate support from the faculty, poor preparation for the role of preceptor, and lacking infrastructure to support precepting activities. Preceptors identified that they need to have structured and predictable communication and collaboration from faculty, training for the role of preceptor and improved processes to guide the clinical site preceptorship activities.

Faculty support of the NNP preceptor. In order to optimize the precepting experience, there must be an effective and collaborative three way relationship between the faculty member, the preceptor, and the student, which includes clear and concise explanation of expectations as well as timely and direct feedback and evaluation (Gibson & Hauri, 2000; Link, 2009; Shirland et al., 2012; Smedley, 2008; Wilson et al., 2009). In this survey, respondents identified that they struggled with inadequate feedback or evaluations from the faculty to the preceptor (53%) and suboptimal communication of expectations of the preceptor (27%). To address these concerns, some NNP preceptors implemented strategies to help improve the communication of goals and expectations.

The clinical training component of NNP education is a significant portion of the overall preparation of the student, and the recruitment, training and retention of NNP preceptors is an important objective for faculty (Wilson et al., 2009). The *Education Standards and Curriculum Guidelines for Neonatal Nurse Practitioner Programs* state that preceptors should be familiar with NNP program requirements, accountabilities for supervision and evaluation of NNP students, and should be evaluated annually to ensure the quality of the preceptorship arrangement (NANN, 2014c). The *Education Standards* list the qualifications of NNP preceptors and the

expectations related to the activities to be completed with the NNP student. Further, the *Education Standards* direct the faculty to provide the preceptor with program goals, outlines of didactic materials and student reading lists, as well as the process of formative and summative evaluations of the student and the preceptor. However, as this survey and other surveys have found, gaps in expectations between faculty and preceptors related to the type and amount of clinical support from the faculty to the preceptor exist (Lyon & Peach, 2001). In an effort to gain a better understanding of preceptors' expectations of faculty, a survey of NP preceptors found that the majority expected at least two on-site clinical evaluations per semester lasting two to three hours each by the faculty, preferably within the first four weeks of the semester (Brooks & Niederhauser, 2010). Further, preceptors expected faculty to observe and assess the student's performance (Brooks & Niederhauser, 2010). The *Education Standards and Curriculum Guidelines for Neonatal Nurse Practitioner Programs* do not direct the specific amounts of time or frequencies of faculty communications, visits and evaluations. However, these details could be developed and outlined in clinical site specific guidelines, and may help to address the need for NNP preceptors to have an adequate level of faculty support.

Just as many NNPs currently struggle with increased workloads, so do faculty (AACN, 2015). Combined with the current faculty workforce shortage, distance learners, state to state education contracts and rules, and limited resources, some faculty may not be able to meet the needs or expectations of the students and preceptors as effectively or as timely as intended. A recent survey of NNP program directors found that 84% of NNP programs had not experienced difficulty in recruiting and retaining NNP faculty in the past three years, and 66% of programs had available NNP student slots. This finding seemed to imply that NNP programs did not suffer from significant faculty shortages as compared to other APRN programs (Freed et al., 2015).

However, the survey did not ask about the NNP faculty workload, so it is difficult to tell if NNP faculty are unable to meet the needs of NNP preceptors due to burdensome workloads.

Regardless, in order to recruit and retain qualified preceptors, and to optimize preceptorship experiences, this current NNP preceptor survey found that there must be better communication and collaboration between the faculty and the preceptors to ensure that the expectations of the *Education Standards* are met. This need has been identified as an opportunity for several years (Wilson et al., 2009). A proactive approach to establishing expectations, communications, and how clinical site student evaluations will be performed between the faculty and preceptor may be helpful (Brooks & Niederhauser, 2010) to help address this need.

Preparation for the Role of Preceptor. NNP preceptors may struggle with NNP students who are at various stages of experience and competency (Luhanga, Yonge & Myrick, 2008; Anthony & Wickman, 2015; Forsberg et al., 2015). Thirty percent of respondents in this survey identified lack of preparation for the role of preceptor as a challenge. Comments demonstrate that some preceptors feel ill prepared to meet the needs of NNP students, particularly those with limited neonatal nursing experience and/or inadequate NNP student skill sets. In order to become more comfortable in the preceptor role, a third of the survey respondents felt that formal preparation for the preceptor role would be helpful. While teaching, coaching and mentoring others is a part of the APRN role, it may not come naturally to some, and formal preparation could be helpful.

Several NNP preceptors indicated in the survey that they and/or their NNP teams had sought support for formalized preceptor training. Resources exist to help guide APRNs to become effective preceptors through self-directed learning and/or classroom instruction (Barker & Pittman, 2010; Link, 2009; NONPF, 2000; Shirland et al., 2012; Smedley & Penny, 2009).

Improved understanding and retention of knowledge and skills related to precepting have been documented when formalized and structured learning programs such as classes or workshops, offered by either the school of nursing or the hospital, were provided to prospective nursing preceptors (Logan et al., 2015; Smedley & Penny, 2009). However, impact on outcomes for patients and healthcare organizations are not known (Windey, Lawrence, Guthrie, Weeks, Sullo, & Chapa, 2015).

Recommended topics for incorporation into preceptor training classes include adult learning and learning styles, dealing with attitudes and biases, teaching and learning approaches, mentoring and self-efficacy, and student evaluation (Barker & Pittman, 2010; Jnah & Robinson, 2015; Shirland et al., 2012; Smedley, 2008). Of note, a recent survey found that the average age of graduating NNP students was 25 to 30 years with 1 to 5 years of nursing experience (Jnah & Robinson, 2015), while the average age of the NNP workforce is 49 years of age with 14 years of experience (Meier & Staebler, 2014). These findings may underscore the need to include content related to generational differences and teaching- learning styles when training NNP preceptors. Initial and ongoing formal training and evaluation of NNP preceptors could help address the need for better preparation for the role of precepting.

Infrastructure to Support Precepting. Some NNP preceptors in the survey seem to struggle with inadequate infrastructure within their NNP team, unit or hospital to sustain precepting activities, which were supported by comments related to issues such as informal scheduling of NNP student hours and documentation redundancies. Lack of formal structures to support NNP preceptors, particularly in the face of heavy workloads, could lead to greater inefficiencies for the preceptor, of which 58% of NNP preceptors identified as a challenge in this survey.

Recommendations have been made to help to improve formal structures and processes in order to support NP preceptors. These include developing guidelines in collaboration with faculty to direct how NP preceptorships will be conducted which could include: establishing a point person at the clinical site to formalize and streamline student application processes, assist with EMR training and other security or access issues, schedule clinical preceptorship hours, and collect and disseminate information on past precepting experiences to help prepare the preceptor for the student's level of experience and skill; developing note writing standards and student evaluation forms; and carving out physical space for the student for documentation and reading (Logan et al., 2015). Additionally, NANN has developed and published forms to help the NNP student and preceptor organize and track clinical assignments and evaluations, which could also be helpful when developing infrastructure to support NNP preceptors (Shirland et al., 2012). The development and implementation of policies or guidelines at the hospital or NNP team level to help provide formal structure for preceptorship activities may be helpful to address the needs of preceptors.

Conclusion

This DNP final project aimed to assess the challenges and needs, or essential items, of NNP preceptors when providing clinical site preceptorships to NNP students. This national cross sectional survey of currently practicing NNP preceptors found that the most commonly identified challenges to precepting NNP students included heavy workloads, lack of compensation or meaningful rewards and recognitions for precepting, and limited support and preparation for the role of preceptor. In this survey, most NNP preceptors and their teams had implemented at least one strategy to help overcome challenges associated with precepting, although less than half felt that those were helpful. Preceptors identified that they needed to have 1) lighter workloads,

including smaller patient assignments and better preparation of students for the clinical rotations; 2) meaningful rewards including monetary compensation for precepting; and 3) improved support and preparation for the role of precepting, including enhanced faculty collaboration and communication, formal preparation for the role of precepting, and defined structures and processes for precepting activities. While there are no quick solutions to solve the NNP workforce shortage in order to have less burdensome workloads in many settings, nor are many organizations or academic programs able or prepared to pay NNP preceptors for the role, there are some strategies that NNPs and their teams could implement to help address some of the challenges they face related to precepting. Working with faculty and utilizing available policies and guidelines from NANN, NONPF and other experts, NNP preceptors and their leadership teams could develop unit or hospital based guidelines or policies to direct NNP student preceptorship activities. These guidelines or policies could include expectations and accountabilities for faculty, students, preceptors and organizations to help improve the formal communications, collaborations, site visits, evaluations, and other processes that NNP preceptors struggle with, but are within their control to influence.

Chapter 6: Summary

NNPs provide high quality, safe and effective care to high risk neonates, and are valuable members of the collaborative team model in NICUs across the U.S. The current NNP workforce shortage threatens this care model, and has many experts looking for ways to address it through enhanced initiatives to recruit more neonatal nurses into the profession and retain currently practicing NNPs (NANN, 2016). Limited access to NNP preceptors for NNP students is a contributing factor to the NNP workforce shortage. While preceptors have identified some positive attributes of precepting, many challenges and barriers exist which create burdens for NNP preceptors. Understanding what NNP preceptors need in terms of essential items or processes in order to engage in effective preceptorship arrangements could help NNPs overcome some of the obstacles of precepting. In this survey, most NNP preceptors and their teams had implemented at least one strategy to help overcome challenges associated with precepting, although less than half felt that those were helpful. Preceptors identified that they needed to have 1) lighter workloads, including smaller patient assignments and better preparation of students for the clinical rotations; 2) meaningful rewards including monetary compensation for precepting; and 3) improved support and preparation for the role of precepting, including enhanced faculty collaboration and communication, formal preparation for the role of precepting, and defined structures and processes for precepting activities. Information from this national, cross-sectional needs assessment of NNP preceptors can be used to develop evidence based practice guidelines or policies at the unit, state or national level to improve preceptor access for NNP students. This in turn, could help improve the numbers of NNPs entering the profession and narrow the workforce gap.

Limitations

Limitations of this DNP final project include the relatively small sample size (n=77) of NNP preceptors and bias. The anticipated response was 10% (n= 130) of the NANNP membership. Access to the electronic survey from the NANN electronic blog site for four weeks with weekly reminders may have been inadequate. Perhaps a higher response rate could have been achieved by either extending the electronic survey period, or through direct mailings to NANNP members with incentives. Despite the lower response rate, the characteristics of NNP preceptors were similar to recent national surveys of NNPs in terms of age, gender, years of clinical practice and geographical distribution (Freed et al., 2010; Meier & Staebler, 2014). Because the survey was only available to NNPs who were members of NANNP, a selection bias may have occurred. Selection biases occur when differences exist between the groups being studied (Stommel & Wills, 2004). This bias may limit the study's generalizability to the larger, target population of all practicing NNPs in the United States. Other potential threats to generalizability include the validity of survey items, forced selection of choices from a preselected menu, nonresponses, and recall bias. Regardless, these findings can be used to inform implications for practice and recommendations.

Implications for Practice and Recommendations

1. Precepting and mentoring others in the NNP role is a core competency of NNP professional practice, and all NNPs should engage in this activity as articulated in the *Advanced Practice Registered Nurse: Role, Preparation, and Scope of Practice* and other policies from NANN. Organizations which employ NNPs should ensure that preceptorship is listed in the NNP job description (NANN, 2014a; NANN, 2014b) and that necessary training, supports and resources are available to perform this duty.

2. In order to become proficient preceptors, all NNPs should have initial and ongoing, formal preparation for, and annual evaluation of, the preceptor role either by the organization which employs the NNP or the academic faculty with which they work to train NNP students. *The Education Standards and Curriculum Guidelines for Neonatal Nurse Practitioner Programs* and the toolkit, *Precepting the Advanced Practice Nurse: From Expert RN to Novice NNP* should be used to guide the formal preparation and evaluations of NNP preceptors (Barker & Pittman, 2010; Jnah & Robinson, 2015; Logan et al., 2015; NANN, 2014c; NONPF, 2000; Shirland et al., 2012; Windey et al., 2015).
3. In collaboration with faculty, NNP preceptors and their leadership teams should develop unit or hospital based guidelines or policies to direct NNP student preceptorship activities. These guidelines or policies could include: how program goals and objectives for the clinical preceptorship are communicated; how and when clinical site student evaluations by the faculty will take place; plans for regular communication; process items around NNP student intake and scheduling at the clinical site; application procedures; EMR and security access issues; documentation and ordering training and requirements; expectations for student conduct; and physical space requirements (Forsberg et al., 2015; Logan et al., 2015).
4. NNPs and their leaders should seek organizational support to decrease preceptor caseload and workload when able (Freed et al., 2015).
5. NNP student clinical site preceptorships should be guided by *The Education Standards and Curriculum Guidelines for Neonatal Nurse Practitioner Programs* and the toolkit, *Precepting the Advanced Practice Nurse: From Expert RN to Novice NNP* (Brooks &

Niederhauser, 2010; Logan et al., 2015; NANN, 2014c; NONPF, 2000; Shirland et al., 2012).

6. Faculty should develop a method for initial and ongoing evaluation of NNP students' level of neonatal nursing skill acquisition in order to quickly identify and address any deficiencies that may interfere with success during the students' education and training program. Likewise, faculty should ensure that NNP students have completed core procedural skill simulations and other critical tasks prior to the commencement of clinical site preceptorships. This information should be shared with the NNP preceptors to help better prepare for the preceptorship (Giddens et al., 2014).
7. Working with available resources, faculty should employ a range of non-monetary rewards for precepting, and allow preceptors to choose which rewards and recognitions are meaningful for the individual (Campbell & Hawkins, 2007; Wilson et al., 2009).
8. Organizations which employ NNPs and/or academic programs which train NNP students should consider the impact of monetary compensation for precepting (Forsberg et al., 2015).
9. Efforts and advocacy to address the NNP workforce shortage should continue at the national, state and institutional levels. These efforts include initiatives to improve recruitment and retention of NNPs adopted by NANN and NANNP, support for the APRN Consensus Model, advocacy to improve Department of Education rules and regulations as they apply to distance educational programs, and federal and/or state support for GNE funding which includes monetary support for preceptors (Meier & Staebler, 2014; NANN, 2014a; NANN 2014b).

10. Efforts and advocacy to address the graduate nursing faculty workforce shortage should continue. Strategies such as innovative use of available resources to help consolidate and streamline courses through heightened collaboration with other nursing and non-nursing educators; re-examination of rules, regulations and policies that create barriers for those interested in faculty positions; re-evaluation of retirement processes; increased academic and clinical partnerships; and investments in faculty professional development should be considered and implemented where able (AACN, 2005; AACN, 2015).

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Appendix A: Neonatal Nurse Practitioner Preceptor Survey

Dear Neonatal Nurse Practitioner,

You are invited to participate in this survey.

The intent of this survey is to describe the challenges and needs of clinically practicing NNPs when precepting an NNP student.

This study has met exempt IRB status by The Ohio State University.

Participation in this survey is voluntary and anonymous and should take 10-15 minutes to complete.

All answers are confidential.

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251, 1-614-688-4792, or meadows.8@osu.edu

You may exit the survey at any time.

Please contact me at any time if you have questions about this study at keels.5@osu.edu.

Thank you for your time,

Erin Keels, MS, APRN, NNP- BC

1. Are you clinically practicing as a Neonatal Nurse Practitioner: YES NO (if no, exit survey)
2. Have you precepted a NNP student in the past 3 years: YES NO (if no, exit survey)
3. Did you precept the student NNP on: Day shift only; Night/weekends only
Combination of Days, nights and weekends
4. Are you expected to precept student NNPs at your primary location? YES NO
5. Have you ever declined to precept a student NNP? YES NO
 - a. If Yes, why:

6. Demographics:

- a. Age: 20-30yrs 31-40yrs 41-50yrs 51-60yrs 61+yrs prefer not to answer
- b. Gender: MALE FEMALE prefer not to answer
- c. Ethnicity: Caucasian Black Hispanic Asian Other prefer not to answer
- d. Years of NICU RN Experience: 0-5yrs, 6-10 yrs, 11-15 yrs, 16-20 yrs,
21-25 yrs, 26-30 yrs, 31-35yrs, 36+ yrs
- e. Years of NNP experience: : 0-5yrs, 6-10 yrs, 11-15 yrs, 16-20 yrs, 21-25yrs,
26-30 yrs, 31-35yrs, 36+ yrs
- f. Region of the United States where you primarily practice as an NNP:
West (CA, OR,WA,NV,ID,AZ,UT,MT,WY,CO,NM,HI,AK)
Midwest (ND,SD,NE,KS,MN,IA,MO,WI,IL,IN,OH,MI)
South (TX,OK,AR,LA,MS,KY,TN,AL,WV,VA,NC,SC,GA,FL)
Northeast (PA,NY,MD,DE,NJ,CT,RI,MA,VT,NH,ME)
- g. Type of setting where you primarily practice as an NNP:
community hospital academic hospital
- h. Is your position fulltime (36-40 hours scheduled) or part time (less than 35 hours
scheduled per week): Fulltime Part-time

7. When precepting a student NNP, please select all of the challenges you have encountered:

- a. Lack of consistent evaluations and/or feedback from faculty to the preceptor.
- b. Heavy or busy patient assignments for the preceptor.
- c. Legal liability concerns for the preceptor.
- d. Decreased opportunities to perform procedures for the preceptor.
- e. Overall decreased work efficiency of the preceptor.
- f. Redundancy of documentation for the preceptor.
- g. Lack of understanding of expectations from the faculty for the preceptor.
- h. Lack of understanding of expectations from the faculty for the student.

- i. Discomfort with providing feedback or coaching to the student from the preceptor.
 - j. Lack of training or preparation for the precepting role.
 - k. Lack of additional financial compensation for precepting.
 - l. General disinterest in precepting.
 - m. Inadequate feedback from the faculty to the student
 - n. Other:
8. Please rank order your choices with 1 being the most important, 2 being the next important and so on
9. What strategies have you or your NNP group implemented in order to overcome these challenges:
10. How effective did you find these strategies:
11. In order to address challenges to precepting, please identify strategies that would be helpful:
- a. Assistance with manuscripts for the preceptor.
 - b. Letters of recognition to the preceptor.
 - c. Teaching opportunities for the preceptor
 - d. Appointment to adjunct faculty position at the academic institution.
 - e. Decreased workload for the preceptor.
 - f. Financial compensation for assuming the preceptor role.
 - g. Increased feedback from faculty to the preceptor.
 - h. Increased onsite support from faculty to the preceptor.
 - i. Formal training related to the preceptor role.
 - j. Increased opportunities to maintain procedural competency for the preceptor.
 - k. Increased faculty support for the NNP student.
 - l. Increased preparation from the faculty for the student.
 - m. other
12. Please rank order the above items with 1 being the most helpful, 2 being the next helpful and so on:
13. Other: Please describe any other challenges or strategies that were not addressed in this survey:

Thank you for completing this survey!

Erin Keels, MS, APRN, NNP-BC

Appendix B: Thematic content analysis of qualitative data from survey for question “What strategies have you or your NNP group implemented in order to overcome these challenges?”

Increased structure/support among/within NNP team (n=39)

Improve precepting process, competence:

Determine consistent goals/means of evaluating students among core NNP practice group

Using NANNP preceptor module

Using NANNP nutrition module

Discussed a preceptor work shop.

Write an email to the next preceptor with a description of what they did/learned and where they are

Created evaluation tools to help track progress

Created preceptor resources

Starting Jan. 2016 we have formed a preceptor committee to address many of the issues listed above

Freedom to make student patient assignment

Research and discussion with NNP team

Research and discussion with NNP team

Maintaining procedural competency:

We attempt to share procedures when there aren't students on

Share procedures

Decrease preceptor caseload:

Trying to give the preceptor a lighter assignment

Limit preceptors assignment to uncomplicated cases when able.

Attempt to lighten preceptor's patient load

take on smaller patient loads

NNP team mates consenting to take a heavier load to off set the load of the preceptor.

NNP team members assisting to promote efficiency for preceptor

adding 2nd nnp during day shift to help with daily notes

Decrease preceptor patient assignment

...no patient assignment for the preceptor or other clinical responsibilities other than mentoring and teaching students

Attempting to have those precepting decrease their patient load when precepting (difficult due to staffing)

Decreased patient assignment load as census allows

Adjusting patient loads based on preceptors clinical experience and year in program

We try to minimize the patient load to only student babies for the NNP with the student when possible

Attempt to balance assignment so that preceptor has lighter load

Spread precepting accountabilities among team:

Rotate precepting

Spread precepting shifts to all group members

sharing a student between a few different preceptors

spreading the precepting around to avoid burnout

sharing the responsibility of precepting

We have decided to not force one preceptor to take one specific student. Our rotation is set according to our schedule and the students just go with our schedule. Unfortunately, some students end up working with so many of us but it has provided exposure to wide range of practice style.

Rotating students among NNPs

Student schedules are flexed around preceptor availability

Compensation:

Request compensation for precepting

Preventing (sp) is voluntary but we all participate however would be nice to have some compensation

Other:

Took conflict resolution class to help me

Increased support for the NNP students (n=21)

NNPs will mentor through a procedure

Assign a consistent preceptor

Hire the NNP student as an "intern" and treat them like part of the staff!

Take higher level NNP students only (eg. 2nd or 3rd years)

Place 1st year students in level 2 NICUs instead of the busy Level 3-4 NICUs

encouraged her to be available day and night

encouraged extra hours above the minimum

choose days for the student when we are better staffed

We strive to limit preceptors to only 2 staff members to help with consistency for the student

Give them advice, once it is not taken we inform the university

Have Student help as they are able

Real time feedback for student

Frank discussions about what is going well and what is not for the student more than once during the semester

Work with students to discuss and document together

Consistent teaching strategy to include supplemental didactic materials and discussions

Dedicated preceptor

Students need feedback, some take it better than others

We encourage students to try to do consecutive days in row to allow for continuity and ability to visualize the "plan" as it plays out

providing in the moment feedback in order to stay consistent and up front about concerns

ask each student to give me 1 or 2 objective and specific goals for each shift or day

Just recently, developing a formal model with expectations for the student or the student NNP Intern.

Increased collaboration/support with academic faculty (n=11)

Communication with university program director regarding lack of communication

Establish primary contact relationship with faculty

Communication with faculty

Establish communication with the faculty at student's university

Attempted to educate program about the limitations of experiences available

Discussions with Faculty

Discussion with faculty

We will designate one person within our preceptor committee to communicate with faculty re: each student

scheduling regular check in meetings with the student's faculty adviser

Ask faculty for written goals and expectations for preceptor, student and the experience

Ask for more formalized feedback from faculty

Prioritized needs of NNP students with other trainees' needs (n=11)

Limit number of students precepted

Putting needs of our new NNPs ahead of students

We sometimes have to limit the number of students we accept for clinicals due to the business of the unit

I alternate experiences for procedures between residents, fellows and NNP students.

limited the number of students

limiting students to 1 at a time at the clinical site

evaluate closely of who and when we will preceptor a student

The only way I can get my work done is to decrease the amount of time I spend with the student. It is not the best way to teach, but, it happens.

limiting students to one per unit per shift

communicate with fellows and residents regarding procedures

starting to refuse taking students

Improved NNP workflow/workload (n=5)

Created online resources using One Note

Attempts to change work flow

Work with IS

Reorganizing work space

Have student hand write a note and plan for us to go over, then Nnp documents.

No strategies (n=9)

None, we just do the work

Not been addressed yet

I wish we had an answer!

Unable to over come

Nothing in place currently

Unfortunately I feel none have been addressed

Have not implemented targeted strategies

Unfortunately we don't have any strategies. Ideally the person precepting would have a lighter assignment but not typically the case

We haven't come up with a good solution especially since we went to EMRs

Increased collaboration/support with physician staff (n=3)

Taking concerns to neonatologists as nursing leadership not concerned

medical staff offers to help precept

Asking our physicians to help with teaching our students

Appendix C: Thematic content analysis of qualitative data from survey for question “Please describe any other challenges or strategies that were not addressed in this survey”

1. NNP student preparation

I find that many students simply don't have enough general NICU experience to function as a beginning NNP. One student had vast experience and she was a joy to have. Others barely have two or three years and are exiting with DNP's and are simply not ready for the role.

Difficult to illicit critical thinking of student; many tried with her; she had problems letting go of the "bedside nurse" role

Challenges: RNs accepted to NP have less and less experience as NICU RN - basic assessment skills & problem solving isn't part of the student profile

Students often come to the clinical environment trapped in the hierarchal medical model that disables them from coming to their practice with understanding of the significance and the necessary contribution of the NNP to clinical practice

2. Infrastructure for NNP preceptors

Preceptors know what the NNP role entails and can precept NNP students if they are patient and have the skills and experience. Do not put NNP students with angry, defensive, or mediocre NNPs!!!

Relationship building

Precepting is not voluntary in our institution and so the person precepting is based on the student's schedule. The student has multiple different preceptors b/c of this. a student is additive work. There is no compensation, no recognition, no support.

Redundancy of note writing, challenges with EHR access

Effective communication and confidence building strategies should be included in NNP curriculum.

Clinical experiences for NNPs need to be formalized and standardized similar to medical student/resident experience. They are currently very unstructured and inconsistent.

Challenge...in our model new NNP oriented are placed with the dedicated preceptor alongside one or more NNP students. They...the orientees...require a different type of instruction and support than the students.

3. Prioritization among trainees

Tertiary care has multiple learners.....NNP students, new NNPs, fellows, residents. Procedural opportunities must be prioritized.

One issue to face at our academic institution is the volume of "learners." We have fellows, residents, med students, NNP students, and new NNPs orienting. We have to rotate who goes to deliveries and has the opportunity to do procedures but that limits the exposure students get.